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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/987,010 11/13/2001		Tetsuyoshi Inoue 204552021700		6384	
759	90 11/19/2002				
Barry E. Bretschneider			EXAMINER		
Morrison & Foerster LLP Suite 5500			NGUYEN, TUAN N		
2000 Pennsylvania Avenue, N.W. Washington, DC 20006-1888			ART UNIT	PAPER NUMBER	
			2828		
		DATE MAIL ED. 11/10/2002	DATE MAIL ED: 11/10/2002		

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No. Applicant(s) NOUE ET AL	•								
Examiner Tuan N Nguyen 2828 2						1 //			
Tuan N Nguyen The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Estatebook or interrupt permismid date of this communication. If the period for reply is periodia date of this communication. If the period for reply is periodia date of this communication. If the period for reply is periodia date of this communication. If the period for reply is periodia date, the maintening date of this communication. If the period for reply is periodia down, the maintening date of this communication. If the period for reply is periodia down, the maintening date of this communication, and the periodia date of the communication. If the period for reply is application is the thin three months after the mailing date of this communication, even if timely filled, may reduce any counted patient them application. Application is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) is fare pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are objected to. By Claim(s) is/are objected to by the Examiner. Application Papers 9) The specification is objected to by the Examiner. Application Papers 9) The proposed drawing correction filed on is/are: a) accepted or b) objected to by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The proposed drawing correction filed on is/are: a) accepted or b) objected to by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The proposed of the periodity documents have been received. 2			09/987,010			W			
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DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09 987 010, filed on November 13, 2001.

Drawings

2. Acknowledge the drawings were received on November 13, 2001.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or non-obviousness.
- 4. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable Hainz et al. (US 5138428) in view of Applicant own admission.

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With respect to claims 1, 2, 3, 4 Hainz et al. ('428) shows in figures 1,7 and discloses in column 1-2 a semiconductor component (fig 1: 1) mount on a base (fig 1: 2) having paste (fig 1: 3) provide between semiconductor component and the base, wherein the bonding temperature is approximately 370 degree C (col 1: 14-16). He further discloses the thick gold paste layer of 2-5um is being used, where solder is pressed out and creep out to reduce stress between the semiconductor and the base (col 2: 8-18), and curing of solder at room temperature (col 2: 21-22). However, Hainz did not disclose the thermal resistance of the semiconductor laser device is 90 degree C/W or lower. Based non applicant own admission in page 4, of prior problem in semiconductor using indium having thermal resistance about 60 degree C/W, while semiconductor using silver paste has thermal resistance of 100 degree C/W or higher; It would have been obvious to one of ordinary skill in the art to provide Hainz et al. with the semiconductor laser device having thermal resistance of 90 degree C/W or lower as disclosed by the Applicant. Since claim 1 recites the same or identical elements/limitations it is inherent to use patents ('428) to recite the method of manufacturing semiconductor laser device, product by process.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable Hainz et al. (US 5138428) in view of Applicant own admission and Yoshiura Masayasu (JP 08-095504).

Hainz et al. ('428) and Applicant discloses the above, except that the conductive die-bond paste is silver paste. Yoshiura Masayasu (JP 08-095504) discloses in the DETAILED DESCRIPTION section [0012] light emitting diode device mounted on a base portion by using an electrical conductive die-bond silver paste. For the benefit of using the electrical conductive

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die-bond silver paste, it would have been obvious to one of ordinary skill in the art to provide

Hainz et al. and Applicant the electrical conductive die-bond silver paste for bonding the two

structure together.

Citation of Pertinent References

The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. It is cited primarily to show the product of the instant invention.

al. (US006349104B1), (US006099678A), Kato et Preston al.

(US006187611B1), Suminoe et al. (US006380620B1), Takeda (US006014318A), Sota et al.

(US006064111A), Ohki et al. (US006143590A), Kinsman (US006239012B1) disclose.

connection of laser diode device and fabrication of the same.

Communication Information

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Tuan N Nguyen whose telephone number is (703) 605-0756. The

examiner can normally be reached on M-F: 7:30 - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Paul Ip can be reached on (703) 308-3098. The fax phone numbers for the

organization where this application or proceeding is assigned are (703) 746-8592 for regular

communications and (703) 746-8592 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 308-1782.

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SUPERVISORY PATENT EXAMINER

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Tuan N Nguyen

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